



PATENT  
Docket No. 110.0081 0101

#5

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Olav K. LYNGBERG et al. )  
Serial No.: 09/647,475 )  
Filed: 29 September 2000 )  
Int'l Filing Date: 17 September 1999 )  
For: COMPOSITE DEVICES INCORPORATING BIOLOGICAL MATERIAL AND METHODS

Group Art Unit: Unassigned  
Examiner: Unassigned

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INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents  
Washington D.C. 20231

Sir:

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with C.F.R. §§ 1.97 *et. seq.*, the materials enclosed herewith are brought to the attention of the Examiner as possibly being of interest in connection with the above-identified patent application. Consideration of each of the documents listed on the attached 1449 forms is respectfully requested. Pursuant to the provisions of M.P.E.P. §609, Applicants further request that a copy of the 1449 forms, marked as being considered and initialed by the Examiner, be returned with the next Official Communication.

Also enclosed for the Examiner's information are copies of an International Search report and an International Preliminary Examination Report relating to the above-identified patent application. Documents cited in the Search Report and Preliminary Examination Report are listed on the attached 1449 forms, and copies of the documents are included herewith.

It is believed that no fee is due, as this Information Disclosure Statement is filed prior to the receipt of any Action on the merits. However, in the event a fee is due, please charge any fee or credit any overpayment to Account No. 13-4895.

**Information Disclosure Statement**

Page 2 of 2

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The Examiner is invited to contact Applicants' Representatives at the below-listed telephone number, if they can be of any assistance during prosecution of the present application.

**CERTIFICATE UNDER 37 C.F.R. 1.8:**

The undersigned hereby certifies that this paper is being deposited in the United States Postal Service, as first class mail, in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on this 17 day of May, 2001.

*Ann M. Mueting*  
Ann M. Mueting

Respectfully submitted,

Olav K. Lyngberg et al.

By their Representatives,  
Mueting, Raasch & Gebhardt, P.A.  
P.O. Box 581415  
Minneapolis, MN 55458-1415  
Phone: (612)305-1220  
Facsimile: (612)305-1228  
Customer Number 26813

May 17, 2001  
Date

By: *Ann M. Mueting*  
Ann M. Mueting  
Reg. No. 33,977  
Direct Dial (612)305-1217

INFORMATION  
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## U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	SubClass	Filing Date If Appropriate
	3,992,158	11/16/76	Przybylowicz et al.			
	4,050,898	09/27/77	Goffe et al.			
	4,797,363	01/10/89	Teodorescu et al.			
	5,447,836	09/05/95	Wolber et al.			
	5,498,525	03/12/96	Rees et al.			
	5,571,722	11/05/96	Rosson			
	5,612,184	03/18/97	Rosson			
	5,723,330	03/03/98	Rees et al.			
	5,728,350	03/17/98	Kinoshita et al.			
	5,763,170	06/09/98	Raybuck			
	5,776,681	07/07/98	Virta et al.			
	5,804,083	09/08/98	Ishii et al.			
	5,855,836	01/05/99	Leyden et al.			
	5,879,951	03/09/99	Sy			
	5,927,547	07/27/99	Papen et al.			
	6,079,283	06/27/00	Papen et al.			
	6,083,762	07/04/00	Papen et al.			
	6,094,966	08/01/00	Papen et al.			

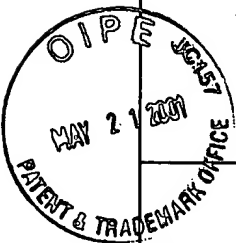
## FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	SubClass	Translation	
						Yes	No
	0 168 933 A2	01/22/86	EPO				
	0 318 452 A1	05/31/89	EPO				
	0 469 021 B1	02/05/92	EPO				
	0 711 199 B1	05/15/96	EPO				
	JP 62138502	06/22/87	Japan (English language abstract only)				

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		JP 62294083	12/21/87	Japan (English language abstract only)				
		WO 89/03878	05/05/89	PCT (with English language abstract)				X
		WO 90/04037	04/19/90	PCT (with English language abstract)				X
		WO 90/04041	04/19/90	PCT				
		WO 90/05910	05/31/90	PCT				
		WO 90/08836	08/09/90	PCT with English language abstract)				X
		WO 90/12887	11/01/90	PCT				
		WO 92/15687	09/17/92	PCT				
		WO 95/03878	02/09/95	PCT				
		WO 95/19446	07/20/95	PCT				
		WO 95/25116	09/21/95	PCT				
		WO 00/16098	03/23/00	PCT				

TC 1700

OTHER DOCUMENTS (Including Authors, Title, Date, Pertinent Papers, etc.)

		"Bug Light: 1998 Discover Technology Awards," <i>Discover</i> , 19(7):84 (1998).
		Flickinger, Michael C., Biotechnology Development grant (no abstract on file), Grant Number 1T32GM08347-01A1 [online]. National Institutes of General Medical Sciences, project dates 09/25/90-06/30/95 [retrieved on January 24, 2001]. Retrieved from the Internet: URL: <a href="http://commons.cit.nih.gov/crisp_historical/crisp_lib.getdoc?textkey=3538536&amp;p_grant_num=1T32GM08347-01A1&amp;p_query=ticket=18343&amp;p_audit_session_id=334651&amp;p_keywords=&gt;">http://commons.cit.nih.gov/crisp_historical/crisp_lib.getdoc?textkey=3538536&amp;p_grant_num=1T32GM08347-01A1&amp;p_query=ticket=18343&amp;p_audit_session_id=334651&amp;p_keywords=&gt;</a> , 1 page.

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		<p>Flickinger, Michael C., Biotechnology Development grant (no abstract on file), Grant Number 5T32GM08347-02 [online]. National Institutes of General Medical Sciences, project dates 09/25/90-06/30/95 [retrieved on January 24, 2001]. Retrieved from the Internet: URL: <a href="http://commons.cit.nih.gov/crisp_historical/crisp_lib.getdoc?textkey=3538537&amp;p_grant_num=5T32GM08347-02&amp;p_query=ticket=18343&amp;p_audit_session_id=334651&amp;p_keywords=&gt;">http://commons.cit.nih.gov/crisp_historical/crisp_lib.getdoc?textkey=3538537&amp;p_grant_num=5T32GM08347-02&amp;p_query=ticket=18343&amp;p_audit_session_id=334651&amp;p_keywords=&gt;</a>, 1 page.</p>
		<p>Flickinger, Michael C., Biotechnology Development grant (no abstract on file), Grant Number 5T32GM08347-03 [online]. National Institutes of General Medical Sciences, project dates 09/25/90-06/30/95 [retrieved on January 24, 2001]. Retrieved from the Internet: URL: <a href="http://commons.cit.nih.gov/crisp_historical/crisp_lib.getdoc?textkey=3538538&amp;p_grant_num=5T32GM08347-03&amp;p_query=ticket=18343&amp;p_audit_session_id=334651&amp;p_keywords=&gt;">http://commons.cit.nih.gov/crisp_historical/crisp_lib.getdoc?textkey=3538538&amp;p_grant_num=5T32GM08347-03&amp;p_query=ticket=18343&amp;p_audit_session_id=334651&amp;p_keywords=&gt;</a>, 1 page.</p>
		<p>Flickinger, Michael C., Biotechnology Development grant (no abstract on file), Grant Number 5T32GM08347-04 [online]. National Institutes of General Medical Sciences, project dates 09/25/90-06/30/95 [retrieved on January 24, 2001]. Retrieved from the Internet: URL: <a href="http://commons.cit.nih.gov/crisp_historical/crisp_lib.getdoc?textkey=2167984&amp;p_grant_num=5T32GM08347-04&amp;p_query=ticket=18343&amp;p_audit_session_id=334651&amp;p_keywords=&gt;">http://commons.cit.nih.gov/crisp_historical/crisp_lib.getdoc?textkey=2167984&amp;p_grant_num=5T32GM08347-04&amp;p_query=ticket=18343&amp;p_audit_session_id=334651&amp;p_keywords=&gt;</a>, 1 page.</p>
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		<p>Flickinger, Michael C. "Enhanced Gene Expression in Immobilized Whole-Cell Biocatalysis," Grant No. 9424063, Continuing Grant, 08/01/95-07/31/98 (abstract) [online]. National Science Foundation, Division of Bioengineering and Environmental Systems, Washington, D.C. [retrieved January 23, 2001]. Retrieved from: Dialog Information Services, FEDRIP Database, 1 page.</p>

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		Hellemans, "Rubber Mold Carves a Path to Micromachines," <u>Science</u> , 285(5424):19, 21 (July 2, 1999).
		Huang et al., "Microstructure Evolution in Polymer Latex Coatings for Whole-Cell Biocatalyst Application," <u>Journal of Colloid and Interface Science</u> , 215(2):226-243 (July 15, 1999).
		Kenis et al., "Microfabrication Inside Capillaries Using Multiphase Laminar Flow Patterning," <u>Science</u> , 285(5424):83-85 (July 2, 1999).
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		Lyngberg et al., "Mercury Detection Using Latex Immobilized Cells," Abstract and Poster, Meeting, North Central Branch American Society of Microbiology, St. Cloud State University, MN, 10 pages (October, 1997).
		Lyngberg et al., "A single-use luciferase-based biosensor using copolymer-film immobilized viable <i>E. coli</i> HB101," Abstract, database CHEMABS [Online] Chemical Abstracts Service, Columbus, Ohio, retrieved from STN XP002127579 & Book of Abstracts, 216 <sup>th</sup> ACS National Meeting, Boston, August 23-27 (1998).
		Lyngberg et al., "A Patch Coating Method for Preparing Biocatalytic Films of <i>Escherichia coli</i> ," <u>Biotechnology and Bioengineering</u> , 62(1):44-55 (January 5, 1999).
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